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EXAMINER

UBER, NATHAN C

ART UNIT

PAPER NUMBER

3622

NOTIFICATION DATE

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ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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DETAILED ACTION

Status of Claims

1. This action is in reply to the amendment filed on 28 August 2009.
2. Claims 1, 7, 8 and 12 have been amended.
3. Claims 2-6 and 15-18 have been canceled.
4. Claim 19 has been added.
5. Claims 1, 7-14 and 19 are currently pending and have been examined.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
8. Claims 1, 7-14 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dean et al. (U.S. 2004/0059708 A1) in view of Anick et al. (U.S. 6,778,975 B1).

Claim 1:

Dean, as shown, discloses the following limitations:

- a processor (see at least figure 3, item 308),

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- *one or more memories to communicate with the processor, the one or more memories storing database (see at least figure 3, item 309),*
- *an advertisement database for maintaining advertisement data of a plurality of advertisements, at least one keyword related to each said advertisement and a category corresponding to each said advertisement (see at least Figure 2, Item 240; see also at least ¶0027 data stored in ad database includes keyword and ad),*
- *an advertisement data searching unit configured for searching the advertisement database for advertisement data corresponding to the maintained category associated with the on-line content to be displayed to a user (see at least Figure 2, Item 260; see also at least ¶0032-0033 selection component receives request for ads and performs the search and provides the result to the ad ordering component),*
- *an advertisement data selecting unit configured for selecting a portion of advertisement data among the searched advertisement data, based on a predetermined criterion, by using a keyword related to the searched advertisement data (see at least Figure 2, Item 260; see also at least ¶0032-0033 selection component receives request for ads and performs the search and provides the result to the ad ordering component),*
- *a display control unit configured for controlling an advertisement associated with the selected advertisement data to be displayed on the user terminal in association with the searched on-line content (see at least Figure 2, Item 280; see also at least ¶0034, prepares ad for presentation to the user),*
- *the advertisement data selecting unit comprises a keyword searching module configured for searching the on-line content to be displayed to the user for the at least one keyword related to the searched advertisement data (see at least ¶0044, analyzing the target document; see also at least ¶0043, the*

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targeting information may be a keyword; see also at least ¶0042, the operations described in ¶¶0043+ describe the function that occurs in the ad selection unit figure 2, item 260),

- *an exposure point computing module configured for inspecting at least one selected from a group consisting of a number of the searched keywords in the on-line content, positions of the searched keywords on the online content and a font style of the searched keywords, the exposure point computing module computing an exposure point for the search advertisement data based on a result of said inspection for the searches keywords (see at least ¶0048, greater frequency of targeted terms),*
- *an advertisement data selecting module configured for selecting a portion of advertisement data among the searched advertisement data based on the exposure point (see at least ¶0033, ads received from the ad selection unit are ordered by relevance based “on a value indication associated with each ad”),*
- *a keyword database for maintaining a keyword, a similar keyword related thereto and an expansion keyword related to the keyword the similar keyword being a keyword having a similar meaning to the meaning of said keyword and the expansion keyword representing an upper concept or a lower concept of the keyword (see at least Figure 2, Item 240),*

With regard to analyzing advertisements multiple times and calculating multiple *exposure points*, Dean discloses “additionally or alternatively” analyzing multiple words in one document (see at least ¶0048) as well as analyzing meta data (see at least ¶0051).

Dean discloses multiple databases (see at least figure 2, item 240). Dean does not specifically disclose a database that stores the particular data in the following limitation.

However, Anick, as shown discloses the following limitation:

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- *a content database for maintaining a content identifier associated with an on-line content and a predetermined content category associated with said on-line content, where said content identifier identifying the on-line content provided to a user terminal through a communication network (see at least column 5, lines 9-20, web directory storing documents, document identifiers/references and categories for each document),*

It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the advertisement selecting methods of Dean, including categorizing web content, with the advertisement selecting methods of Anick which stores web document classification in an indexed database (rather than reclassifying documents for every search as in Dean) since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable and because Anick discloses that the web directory is optimized to allow fast retrieval of references (see column 5, lines 15-17).

Claim 7:

The combination Dean/Anick discloses the limitations as shown in the rejection above.

Further Dean, as shown, discloses the following limitation:

- *the advertisement data selecting module selects the predetermined number of advertisement data of which the exposure point ranks high (see at least ¶0033, a list of ads are received from the ad selection unit and are ordered by relevance based "on a value indication associated with each ad").*

Claim 9:

The combination Dean/Anick discloses the limitations as shown in the rejection above.

Further Dean, as shown, discloses the following limitation:

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- *the advertisement data selecting module sequentially selects a predetermined number of the selected advertisement data during the predetermined period* (see at least ¶0033, a list of ads are received from the ad selection unit and are ordered by relevance based “on a value indication associated with each ad”, here Examiner broadly interprets *predetermined period* based on the specification to mean an arbitrary amount of time including at least the amount processing time required to complete the method).

Claims 8 and 10-11:

The combination Dean/Anick discloses the limitations as shown in the rejection above.

Further Dean, as shown, discloses the following limitations:

- *the advertisement data selecting module selects predetermined advertisement data from the searched advertisement data on the basis of the exposure point and* (see at least ¶0033, a list of ads are received from the ad selection unit and are ordered by relevance based “on a value indication associated with each ad”),
- *selects a predetermined number of random advertisement data, during a predetermined period, from the selected advertisement data* (see at least ¶0033, a list of ads are received from the ad selection unit and “may be ordered based on the value indication”)

Dean does not specifically disclose that the ordering may be random. However, there are only a finite number of ways to order a predetermined list of advertisements for presentation to a user (including in order of relevancy, based on the rate paid for the ad, randomly, etc.) Further Anick discloses selecting categories randomly (dart-board) when more than one category includes documents that match a search (see at least column 6, lines 1-20). Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to try a different criteria for ordering the

advertisements for presentation to the user (such as random ordering/selection) since there are a finite number of identified, predictable potential solutions and one having ordinary skill in the art could have pursued the known potential solutions with a reasonable expectation of success.

Claims 12 and 19:

Dean, as shown, discloses the following limitations:

- *maintaining advertisement data of a plurality of advertisements, at least one keyword related to each said advertisement and a category corresponding to each said advertisement data, in an advertisement database (see at least ¶0030, ad data stored in databases),*
- *determining a content category for an on-line content provided to a user terminal through a communication network via a content classifying system utilizing a predetermined classification algorithm (see at least ¶0047-0050, topics of content are determined by analysis of the text in the content and one of several of different possible predetermined algorithms applied to the analysis; ¶0047 discloses determining the relative number of times a word appears; ¶0049 discloses weighting; ¶0050 discloses scoring; Examiner notes that this limitation is interpreted with the broadest reasonable interpretation in light of the specification and further notes that page 7, lines 5-9 and page 14, lines 22-24 Applicant discloses that the content classification system determines the classification of content from the text and in step 992 using keywords from the content text),*
- *storing at least one of said databases in a memory (see at least ¶0038, databases are stored in secondary storage element to the main memory of the server device)m,*

- *searching the advertisement database for advertisement data corresponding to the category associated with the on-line content to be displayed to a user (see at least ¶0032, ad selection component),*
- *selecting advertisement data among the searched advertisement data, based on a predetermined criterion, by using at least one keyword related to the searched advertisement data (see at least ¶0033, ad ordering component),*
- *controlling an advertisement associated with the selected advertisement data to be displayed on the user terminal in association with the content, (see at least ¶0034, ad serving component)*
- *where said steps of determining a content category, searching the advertisement database, selecting advertisement data and controlling an advertisement is preformed by a processor (see at least ¶0036, processors executes the program stored in the memory; see also at least ¶0040 the memory stores the programs depicted in figure 2 and described in ¶¶0032-0035),*
- *maintaining in a keyword database, a similar keyword related thereto and an expansion keyword related to the keyword, wherein the similar keyword being a keyword having a similar meaning to the meaning of said keyword and the expansion keyword representing an upper concept or a lower concept of the keyword (see at least Figure 2, Item 240),*
- *the step of selecting comprises the steps of searching the on-line content to be displayed to the user for the at least one keyword related to the searched advertisement data (see at least ¶0044, analyzing the target document; ¶0043 the targeting information may be a keyword),*
- *inspecting at least one selected from a group consisting of a number of the searched keywords in the on-line content, positions of the searched keywords on the online content and a font style of the searched keywords,*

computing an exposure point for the search advertisement data based on a result of said inspection for the searches keywords (see at least ¶0048, greater frequency of targeted terms),

- *selecting advertisement data from the searched advertisement data based on the exposure point (see at least ¶0033, ads received from the ad selection unit are ordered by relevance based “on a value indication associated with each ad”),*

Dean discloses multiple databases (see at least figure 2, item 240). Dean does not specifically disclose a database that stores the particular data in the following limitation.

However, Anick, as shown discloses the following limitation:

- *maintaining a content identifier and said content category associated with said on-line content in a content database, the content identifier identifying said on-line content (see at least column 5, lines 9-20, web directory storing documents, document identifiers/references and categories for each document),*

It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the advertisement selecting methods of Dean, including categorizing web content, with the advertisement selecting methods of Anick which stores web document classification in an indexed database (rather than reclassifying documents for every search as in Dean) since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable and because Anick discloses that the web directory is optimized to allow fast retrieval of references (see column 5, lines 15-17).

Claim 13:

The combination Dean/Anick discloses the limitations as shown in the rejection above.

Further Dean, as shown, discloses the following limitations:

- *maintaining the advertisement database comprises the steps of: receiving a keyword and advertisement data from an advertiser (see at least ¶0027, ad entry management component),*
- *receiving selection of a category for the advertisement data from the advertiser (see at least ¶0027, ad entry management component),*
- *storing the received keyword and the category in association with the advertisement database (see at least ¶0030, ad data stored in databases).*

Claim 14:

The combination Dean/Anick discloses the limitations as shown in the rejection above.

Further Dean discloses determining relevant advertisement and content topics; however Dean does not specifically disclose categories as in the limitations below. Anick, as shown, discloses the following limitations:

- *receiving selection of a category from the advertiser comprises the steps of maintaining categories in a predetermined database (see at least column 6, lines 54-55, advertisers specify categories for their ad submissions),*
- *providing the categories for the advertiser by a directory searching method (see at least column 5, line 17-27, the categories are predetermined),*
- *receiving selection of a predetermined category among the provided categories, from the advertiser (see at least column 6, lines 54-55, advertisers specify categories for their ad submissions),*

It would have been obvious to one having ordinary skill in the art at the time of the invention to combine with Dean the additional functionality of Anick which allows advertisers to additionally categorize their ads rather than rely solely on keywords to determine advertising relevancy to content since the claimed invention is merely a

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combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

Response to Arguments

9. Applicant's arguments filed 28 August 2009 have been fully considered but they are not persuasive.
10. Applicant continues to present arguments in an attempt to distinguish the Dean reference from Applicant's invention on the basis that Dean's determination of "topics" is different from Applicant's determination of "categories." This line of argument is moot with respect to claim 1 since Applicant removed the limitation in question *determining a content category for content provided to a user terminal*... However the argument is relevant to claims 12 and 19 in which this limitation is still present. In this iteration of Applicant's argument, Applicant again asserts that the English definitions of 'topic' and 'category' are not identical and supports this assertion by reference to a dictionary and further appends copies of the referenced dictionary pages. Examiner does not dispute that the dictionary definitions provided are not identical; however, Examiner maintains that the definitions are equivalent. Applicant argues that since neither Applicant's specification nor the Dean specification provide special definitions of the words 'topic' and 'category' that these words must be given their "dictionary" and "ordinary" meanings (see page 15 of Applicant's remarks). Applicant also asserts that dictionaries are useful resources in assisting the court to determine the "ordinary and customary meanings of claim terms" (see page 14 of Applicant's remarks). Examiner does not dispute the Applicant's cited case law, however Examiner is under the understanding that dictionaries are treated as secondary evidence since dictionaries amount to evidence outside the record. And both the Examiner and courts prefer to first look to the evidence in the record, i.e. the disclosure, to support a determination of the meaning of claim language. As Examiner noted in the previous rejection, Examiner is satisfied with the meaning of the terms 'topic' and 'category' conveyed by the disclosures of the Dean

reference and Applicant's application. Examiner takes issue with relying on the dictionary definitions suggested by Applicant in a vacuum because the dictionary definitions fail to account for the context in which the terms are used. Further Examiner notes that the determination of 'ordinary and customary' usage of the language, whether derived from the disclosure or from a dictionary, must be relevant to the ordinarily skilled artisan in the relevant art rather than broadly based on any English speaker as Applicant suggests by relying on a single standard English dictionary.

11. For the sake of argument, Examiner will accept Applicant's definitions and demonstrate why the terms are equivalent as used in the disclosures. Applicant asserts that 'topic' means "the subject of a discourse" (see page 14 of Applicant's remarks). As used in the Dean reference, Dean discloses "the target document is analyzed to identify a topic corresponding to that target document" (Dean, ¶0044). Applying Applicant's definition, Dean discloses analyzing the target document to identify a subject of discourse corresponding to that target document. Applicant claims *determining a content category for an on-line content provided to a user...* Examiner interprets this limitation to mean identifying the subject of the on-line content. Applicant asserts that 'category' means "any of several fundamental and distinct classes to which entities or concepts belong" (emphasis added, see page 14 of Applicant's remarks). Applying Applicant's definition, Applicant claims determining *any* of several fundamental and distinct classes to which the on-line content provided to a user belongs. Such a 'fundamental and distinct class' may include the subject of the on-line content, or topic according to the definition Applicant provided. To use an example previously provided by Applicant, an online crime report would be analyzed by both systems and both systems would determine the 'topic'/'subject'/category of the on-line content and both systems would recognize that the subject matter of the on-line content was reporting criminal activity. Accordingly, Examiner maintains that the use of 'topic' in the Dean reference is equivalent to Applicant's use of 'category' in the current application.
12. Applicant further attempts to overcome Dean with a slightly misleading argument on page 13 of Applicant's remarks. Applicant asserts that 'the claimed invention maintains a predetermined

category associated with on-line content and advertising content' then Applicant remarks that 'Dean does not teach a method of analyzing the target document based on the category of the target document.' This argument is slightly misleading because the premise is not related to the argument. The limitation regarding 'the predetermined category' is taught by the Anick reference not the Dean reference. The 'determining the category of on-line content' limitation is taught by Dean as demonstrated above. Applicant admits that Dean discloses comparing target information received from an advertiser, i.e. predetermined criteria, to a topic of a target document as determined by analyzing the on-line content/target documents. Applicant's argument attempts to show nonobviousness by arguing against the references individually; however one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Anick teaches maintaining predetermined category databases, and Dean teaches analyzing on-line content to determine the subject of the content and matching that content to predetermined information. The combination renders obvious matching the determined content topics to predetermined categories.

13. Applicant's argument with respect to claim 13 is relevant to the above discussion and will be addressed here. Applicant argues that Dean does not disclose the steps of receiving selection of a category for the advertisement data from the advertiser and storing the received category (see page 17 of Applicant's remarks). Examiner disagrees. As noted in the rejection above and as demonstrated by the arguments above, the 'topic' of Dean and the 'category' of Applicant's claims are equivalent and Applicant admits that Dean discloses advertisers entering one or more topics associated with their ads (*Id.*). Further the combination of references also teaches a category database as noted in the Anick reference. Applicant's argument with respect to claim 13 is not persuasive.
14. Examiner notes with respect to Applicant assertion that the claimed invention 'classifies the target document into a category according to relevant advertising' (see page 13 of Applicant's remarks) that this limitation is absent from claims 1, 12 and 19. Claim 1 discloses no classification step,

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and claims 12 and 19 disclose only determining a category of on-line content utilizing a classification algorithm. Applicant's assertion that the claims classify the target document into a category according to relevant advertising is false. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Applicant also asserts on page 12 of Applicant's remarks that the claimed invention 'assigns a target document a category for classifying directory-based document' this limitation is also missing from the independent claims. Applicant's arguments against the Dean reference are not persuasive for the various reasons demonstrated above.

15. Next Applicant argues that Dean does not disclose 'expansion of target keywords' (see page 15 of Applicant's remarks). Applicant specifically argues that the citation of the keyword database is insufficient to teach Applicant's claim because the keywords in the Dean database are provided by the advertiser or extracted from the advertisement materials. Applicant asserts that Dean fails to disclose 'expansion of the target keywords received from the advertiser' (see page 16 of Applicant's remarks). Claim 1 recites the limitation 'a keyword database for maintaining a keyword, a similar keyword related thereto and an expansion keyword...' The limitation further defines the meaning of 'similar keyword' and 'expansion keyword.' The limitation however does not recite a step of 'expanding' the keywords received from the advertiser, nor does the limitation foreclose a database of keywords populated by the advertiser or from an extraction process as taught by Dean. Claims 12 and 19 each recite similar limitations, 'maintaining in a keyword database...' Again Applicant is arguing features that are not present in the claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Dean adequately discloses the claimed features. Applicant's argument against the Dean reference is not persuasive.
16. In Applicant's final argument, Applicant argues that the Dean reference is insufficient because 'Dean simply selects proper advertisements based on frequency of targeted term(s)' whereas the

claimed invention inspects at least one selected from the group consisting of a number of the searched keywords...' (see page 16 of Applicant's remarks). Examiner sees no difference between Applicant's characterization of Dean and Applicant's claim language as reproduced above. Applicant discloses in the claims that the 'inspection' step may be limited to only the number of keywords. Further the claim computes the exposure point based on the result of the inspection. The breadth of this claim language permits Examiner's interpretation of the claim to mean that the claimed invention, like Dean, inspects the document then computes (i.e. counts) the number of keywords (i.e. the exposure point) and applies the most relevant advertising. Applicant asserts that the 'determination of relevance based on frequency of targeted terms appeared in the target documents is distinctively different from the claimed determination of relevance based on the exposure points computed in the recited way' (see page 16 of Applicant's remarks) however this assertion is neither supported by Applicant's claim language nor by Applicant's arguments. There is absolutely no disclosure in the claims of how the exposure point is computed. We only know that the computation is based on the inspection of the number of keywords, or alternatively the number of expansion keywords etcetera. The claim language does not distinguish the claimed invention from the Dean disclosure. Examiner implores Applicant to consider the breadth of Applicant's claim language. The invention that appears to be the subject of Applicants arguments is not disclosed by the current claim language.

Conclusion

17. The previous rejections are maintained as noted above. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
18. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

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calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

19. Any inquiry of a general nature or relating to the status of this application or concerning this communication or earlier communications from the Examiner should be directed to **Nathan C Uber** whose telephone number is **571.270.3923**. The Examiner can normally be reached on Monday-Friday, 8:30am-4:00pm EST. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, **Eric Stamber** can be reached at **571.272.6724**.
20. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal/pair> <<http://pair-direct.uspto.gov>>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866.217.9197** (toll-free).
21. Any response to this action should be mailed to:

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P.O. Box 1450, Alexandria, VA 22313-1450

or faxed to **571-273-8300**.

22. Hand delivered responses should be brought to the **United States Patent and Trademark Office Customer Service Window**:

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/Nathan C Uber/ Examiner, Art Unit 3622
17 December 2009

/Eric W. Stamber/
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